

### **ABSTRACT OF THE DISCLOSURE**

A lithium secondary battery exhibiting good mechanical properties and using a thin negative current collector is provided. The lithium secondary battery includes a positive electrode formed by coating lithium metal oxides on a positive current collector and a negative electrode formed by coating carbonaceous materials or  $\text{SnO}_2$  on a negative current collector. The negative current collector is made of a Cu-based alloy foil with a thickness of 20  $\mu\text{m}$  or less and the Cu-based alloy foil includes at least one material selected from the group consisting of nickel, titanium, magnesium, tin, zinc, boron, chromium, manganese, silicone, cobalt, iron, vanadium, aluminum, zirconium, niobium, phosphorous, bismuth, lead, silver and misch metal. The lithium secondary battery further includes a separator interposed between the positive and negative electrodes and an electrolyte into which the positive and negative electrodes and the separator are immersed.